#### **OTI COURSES DESCRIPTIONS**

## 1214-Introduction to Industrial Hygiene for Safety Personnel (3.5 days)

This shortened version of #1210 introduces the student to the general concepts of industrial hygiene. Topics include the recognition of common health hazards such as air contaminants and noise, hazard evaluation through screening and sampling, and control methods for health hazards including ventilation and personal protective equipment. Course features laboratories in the calibration and use of sampling and monitoring instruments.

#### **Prerequisites**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

#### 2000- Construction Standards (3.5 days)

This course covers the application of 29 CFR 1926 to the construction industry. Topics include coverage of each section of the construction standards, inspection exercises, and citation documentation. Course features a one-day field trip to a construction site. Special emphasis is placed on those topics that are the most hazardous, using OSHA standards as a guide.

## **Prerequisites**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

## 2044 - Machinery and Machine Guarding (3.5 days)

This shortened version of #2040 familiarizes the student with various types of common machinery and the related safety standards. Guidance is provided on the hazards associated with various kinds of machinery and the control of hazardous energy sources (lockout/tagout). This is a Blended Learning Course. Students must complete a web-based training portion of the course prior to attending the resident portion. The web-based portion may require up to 5 hours seat time. The course presents an approach to machinery inspection that enables participants to recognize hazards and to provide options to achieve abatement. These hazards include mechanical motions and actions created by points of operation and other machinery processes. Also included is hands-on training in the laboratories.

#### **Prerequisites:**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

## 2075(2074)-Fire Protection and Life Safety (3.5 days)

This shortened version of #2070 introduces the student to the recognition of potential fire hazards and emergency procedures. Topics include the chemistry of fire, types and effectiveness of extinguishing agents, means of egress, detection and alarm systems, fire brigades, fire prevention plans, and the Life Safety Code (NFPA 101). 29 CFR 1910, Subparts E and L, and referenced NFPA codes provide the basis for the course.

#### **Prerequisites**

Federal Agency or Department personnel: Course #2005, #6000, or #6010.

## **Blended Learning Prerequisite**

This is a Blended Learning Course. Students must complete a web-based training portion of the course before attending the resident training portion of the course. Each student will receive a letter with the URL, a login ID, and a temporary password for taking the web-based portion of the course. The student will have approximately six weeks to complete the web-based training portion of the course, which must be completed by noon on the Friday before the resident training portion is scheduled to start or the student will be dropped from the course. The student must complete both the web-based training and OTI resident training to receive credit for the course. The web-based portion of the course may require up to 15 hours seat time.

#### 2220 - Respiratory Protection (3.5 days)

This course covers the requirements for the establishment, maintenance, and monitoring of a respirator program. This is a Blended Learning Course. Students must complete a web-based training portion of course prior to attending the resident portion. The web-based portion may require up to 12 hours of seat time. Course features laboratories on self-contained breathing apparatus, respirator selection, respirator fit testing, and supplied-air respirator systems. Workshops are used to supplement web training information for respirator selection and respirator inspection procedures.

## **Prerequisites:**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

# <u>2250-Principles of Ergonomics Applied to Work-Related Musculoskeletal and Nerve Disorders (3.5 days)</u>

This course covers the use of ergonomic principles to prevent musculoskeletal disorders. Topics include work physiology, anthropometry, musculoskeletal disorders, video display terminals, and risk factors such as vibration, temperature, material handling, repetition, and lifting and transfers in health care. Course emphasis is on industrial case studies covering analysis and design of work stations and equipment, laboratory sessions in manual lifting, and coverage of current OSHA compliance policies.

## **Prerequisites**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

## 2330-Indoor Air Quality (3.5 days)

This course assists health and safety professionals in evaluating indoor air quality. Focus is placed on the nature and causes of indoor air problems in office building environments as well as on investigative approaches and solutions. Topics covered include current air quality and ventilation standards, HVAC system design and operation, survey instrumentation and measurements, control techniques, sources of available help, and special issues such as bioaerosols and radon. Students are required to bring a scientific calculator to this course.

## **Prerequisites**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

### 3010- Excavation, Trenching and Soil Mechanics (3.5 days)

This course focuses on OSHA standards and on the safety aspects of excavation and trenching. This is a Blended Learning Course. Students must complete a web-based training portion of the course prior to attending the resident portion. The web-based portion of the course may require up to 5 hours seat time. Students are introduced to practical soil mechanics and its relationship to the stability of shored and unshored slopes and walls of excavations. Various types of shoring (wood timbers and hydraulic) are covered. Testing methods are demonstrated and a one-day field exercise is conducted, allowing students to use instruments such as penetrometers, torvane shears, and engineering rods.

#### **Prerequisites:**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

#### 3110-Fall Arrest Systems (3.5 days)

This course provides an overview of state-of –art technology for fall protection and current OSHA requirements. This is a Blended Learning Course. Student must complete a web-based training portion of the course prior to attending the resident portion. The web-based portion of the course may require up to 5 hours seat time. Topics covered include the principles of fall protection, the components of fall arrest systems. The limitation of fall arrest equipment, and OSHA policies regarding fall protection. Course features a one-day field exercise demonstration fall protection equipment.

## **Prerequisites:**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

## 3260 -Health Hazards in the Construction Industry for Safety Personnel (3.5 days)

This course focuses on the recognition and evaluation of health hazards in the construction industry. Topics include health hazards associated with abrasive blasting, asbestos, confined spaces, demolition, painting, roofing, silica, lead, and welding. Participants will be instructed in the recognition of potential hazards, proper evaluation methods, applicable standards, and procedures for referring health hazards to industrial hygienists to complete the inspection/citation process.

#### **Prerequisites:**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

### 3350-Emergency Response to Hazardous Substance Releases (3.5 days)

This course is designed to increase the student's knowledge of emergency response procedures for facilities that must meet the requirements of either 29 CFR 1910.120(q) or 29 CFR 1926.65(q). Topics include a thorough discussion of scope, application, definitions, other related standards; elements of an emergency response plan; training requirements; the incident command system; medical surveillance; and post-emergency response. Workshops address emergency response versus incidental release and program evaluation.

#### **Prerequisites**

Federal Agency or Department personnel: Course #6000, #6010 or equivalent.

## 6010- Occupational Safety and Health Course for other Federal Agencies

This course is designed for full-time Federal agency safety and health officers or supervisors assigned responsibilities under Executive Order 12196 and 29 CFR 1960. The course provides an overview of the Occupational Safety and Health Act, Federal agency occupational safety and health responsibilities, and workplace inspection techniques. Participants are given instruction in various OSHA standards. Special emphasis is directed at safety and health hazard that or causing serious injuries and illnesses in the Federal sector. The course features a mock inspection and use of laboratory equipment. This course is limited to Federal Agency Personnel Only. For further information, please contact the Chief of the Safety Branch.